

Why Protected Areas (PAs) become 'paper parks'? – Potentials of Reward Mechanisms and Landscape Conservation for Working PAs

Grace B. Villamor
World Agroforestry Centre
gvillamor@cgiar.org

NIPAS Act

- National Integrated Protected Areas System Act (RA 7586) of 1992
- Among its main features are:
 - designation of an added layer of protection to stabilize protected area boundaries by establishing **buffer zones**; and
 - recognition of **ancestral rights** and the inclusion of the policy of community sustainability with concern for the development of the socio-economic and political fibers of the communities that directly uses the resources.
- 290 protected areas

After 10+ years...

- Only five protected areas have been formally established by congressional actions:
 - 1) Northern Sierra Madre Natural park;
 - 2) Mt. Kitanglad Natural Park;
 - 3) Batanes Protected Landscape and Seascape;
 - 4) Mt. Kanlaon Natural park; and
 - 5) Sagay Protected Landscape and Seascape

Those that were initially identified become merely **paper parks**

- Lack of a national land-use policy that will delineate clearly the boundaries of the forest line and other land uses including PAs;
- Conflict of NIPAS act to various national laws e.g. Local government code of 1992; the mining act of 1995; Indigenous People's right act (IPRA) of 1997, Agriculture and Modernization Act of 1997 (conflicts involved the area coverage; and appropriate landuse e.g. mining claims)
- Lack of national constituency for biodiversity conservation in general and protected areas work in particular due to limited awareness among the general populace
- Limited number of conservation professionals
- Limited management of enforcement capacity
- Limited resources
- Limited up-to-date natural science and socio-economic information that can guide the management plans

Recent studies...

- buffer zones are **inadequate** to alleviate effects of fragmentation, contamination by agrochemicals, hunting, and unsustainable or illegal logging (DeFries et al. 2005; Harvey et al 2008)

- fate of biodiversity within protected areas is therefore inextricably linked to the broader landscape context, including how the surrounding agricultural matrix is designed and managed (Wallace et al. 2005; Vandermeer et al. 2007)

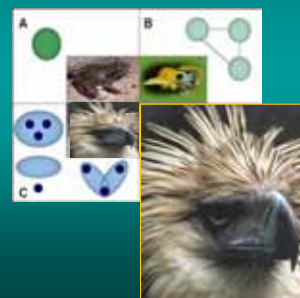
- What if the species you are protecting requires landscape approach?

Protecting biodiversity while sustaining agricultural productivity, indigenous cultures, and rural livelihoods, requires a new approach to conservation...

Objectives: develop methods for setting targets for species requiring landscape management

Some threatened species naturally occur at low densities and/or move very widely – they are "area-demanding".

→ develop methods for determining population targets, and for mapping area and configuration targets for the landscape management of area-demanding threatened species beyond KBAs.



Species targets: IUCN Red List



CR = Critically Endangered, EN = Endangered, VU = Vulnerable

Setting targets for area-demanding species: the Philippine Eagle (*Pithecophaga jefferyi*) example

2006 IUCN Red List: CR C1; EN A2c,d; A3c,d; C2a(i); D1.

- Under the A and C1 criteria (decline rate), targets for the species require site-specific actions.
- Under the C2a(i) and D1 criteria (population), targets for the species require landscape scale actions.
- The more severe of these, C2a(i) requires >1,000 individuals in a sub-population to drop out of VU.

Territory size for 1 pair (2 individuals) is 25-50 km²

So, 1,000 individuals require 12,500-25,000 km²
(500 multiplied by 25-50 km²)

So, how large are the largest known subpopulations?

Total area of adjacent KBAs supporting the two largest subpopulations:

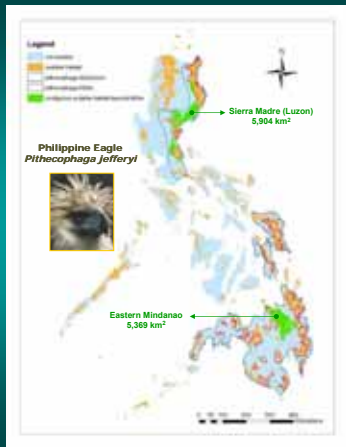
Sierra Madre (Luzon) – 7,882 km²
Eastern Mindanao – 5,977 km²

Subtracting these areas from 12,500-25,000 km² gives area targets beyond KBAs:

Sierra Madre (Luzon)
4,618 - 17,118 km²
Eastern Mindanao
6,523 - 19,023 km²

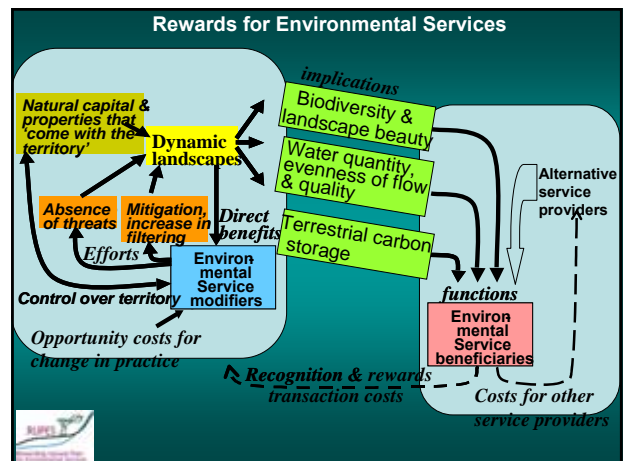
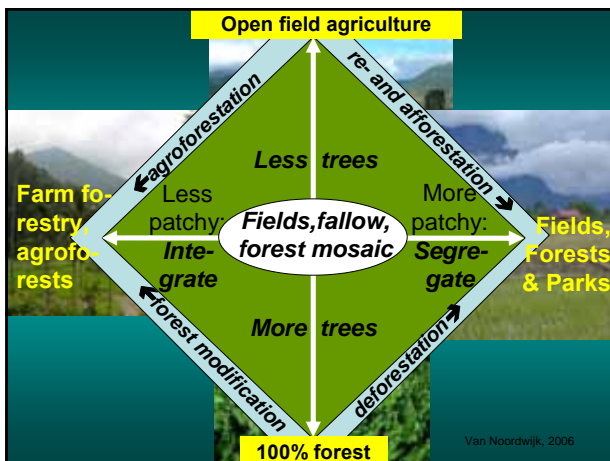
We can approach these targets: the current area of contiguous suitable habitat beyond KBAs are:

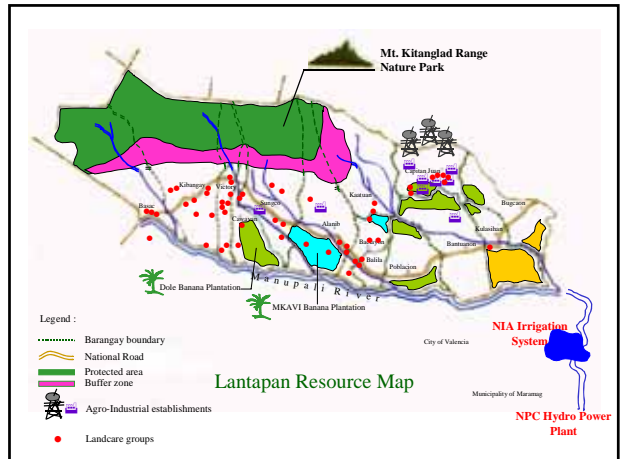
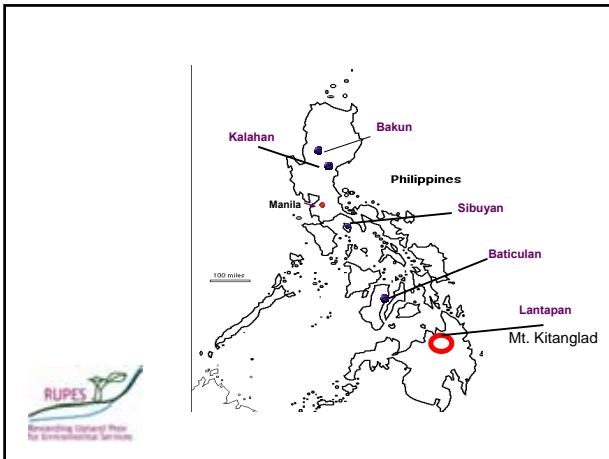
Sierra Madre (Luzon) – 5,904 km²
Eastern Mindanao – 5,369 km²



Outstanding questions: implementation

- How can land uses be economically optimized while maintaining biodiversity?
- What landscape level actions, and where, would deliver the greatest return-on-investment for biodiversity?
- What roles can different sectors play in these?
- What about opportunity costs?
- What about the indigenous people and their ancestral domain?
- Payments/Rewards for ecosystem services?





Stage	Providers, sellers of ES	Intermediaries	Beneficiaries, buyers of ES	Key questions:
I. Scoping		Rapid Assessment of ES		Would rewards be realistic? Is poverty linked to ES issues? Will they be voluntary? Who is/will be excluded? What conditionality will apply? Are the rewards pro-poor?
II. Stakeholder analysis		Identifying partners		
III. Negotiations		Mediation		
IV. Implementation and monitoring of agreements		Audit		Effectiveness Sustainability Equity

Van Noordwijk, 2006

